

# Limits and Continuity

## AP Calculus AB · Vocabulary

English	中文	Pinyin
$\pm$ change	变化	biàn huà
$\boxplus$ accumulation	累积	lěi jī
$\rightarrow$ limit	极限	jí xiàn
$\odot$ at a single instant	瞬间	shùn jiān
$\sphericalangle$ average rate of change	平均变化率	píng jūn biàn huà lǜ
$[]$ interval	区间	qū jiān
$\curvearrowright$ instantaneous rate of change	瞬时变化率	shùn shí biàn huà lǜ
$\rightarrow$ approaches	趋近	qū jìn
$\curvearrowright$ derivative	导数	dǎo shù
$\int$ integral	积分	jī fēn
$\infty$ arbitrarily	任意地	rèn yì dì
$\checkmark$ sufficiently	足够	zú gòu
$\sim$ behavior	行为	xíng wéi
$\sphericalangle$ graphically	用图象	yòng tú xiàng
$\boxplus$ numerically	用数值	yòng shù zhí
$\boxplus$ analytically	用解析式	yòng jiě xī shì
$\leftarrow$ left-hand limit	左极限	zuǒ jí xiàn
$\rightarrow$ right-hand limit	右极限	yòu jí xiàn
$\langle \rangle$ one-sided limits	单侧极限	dān cè jí xiàn
$\bigcirc$ open circle	空心圆	kōng xīn yuán
$\bigcirc$ hole	空洞	kōng dòng
$\odot$ closed circle	实心圆	shí xīn yuán
$\updownarrow$ jump	跳跃	tiào yuè
$\boxplus$ unbounded	无界	wú jiè
$\approx$ oscillates	振荡	zhèn dòng
$\text{ruler}$ scale	比例	bǐ lì
$\boxplus$ table	表格	biǎo gé
$\square$ limit theorems	极限定理	jí xiàn dìng lǐ
$\boxplus$ Composite	复合函数	fù hé hán shù
$\text{substitution}$ direct substitution	直接代入	zhí jiē dài rù
$\text{question mark}$ indeterminate form	未定式	wèi dìng shì
$=$ equivalent form	等价形式	děng jià xíng shì
$\times$ Factor and cancel	因式分解并约分	yīn shì fēn jiě bìng yuē fēn
$\div$ rational function	有理函数	yǒu lǐ hán shù
$\boxplus$ conjugate	共轭	gòng è
$\sqrt{\quad}$ radical	根式	gēn shì
$\uparrow$ dominant	主导	zhǔ dǎo
$\text{squeeze}$ squeeze theorem	夹逼定理	jiā bī dìng lǐ
$\odot$ discontinuous	间断	jiàn duàn
$\bigcirc$ Removable discontinuity	可去间断	kě qù jiàn duàn
$\times$ Jump discontinuity	跳跃间断	tiào yuè jiàn duàn

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$\uparrow \equiv$ Infinite discontinuity	无穷间断	wú qióng jiàn duàn
$\curvearrowright$ vertical asymptote	垂直渐近线	chuí zhí jiàn jìn xiàn
— continuous	连续	lián xù
$\curvearrowleft$ continuous on an interval	在区间上连续	zài qū jiān shàng lián xù
$\times^2$ exponential	指数	zhǐ shù
$\surd$ logarithmic	对数	duì shù
$\surd$ trigonometric	三角	sān jiǎo
$\uparrow \nearrow$ piecewise-defined function	分段函数	fēn duàn hán shù
( ) parameter	参数	cān shù
$\rightsquigarrow$ infinite limits	无穷极限	wú qióng jí xiàn
$\infty$ limits at infinity	无穷远处的极限	wú qióng yuǎn chù de jí xiàn
$\gg$ end behavior	末端行为	mò duān xíng wéi
— horizontal asymptote	水平渐近线	shuǐ píng jiàn jìn xiàn
$\circlearrowleft$ degrees	次数	cì shù
$\div$ ratio of the leading coefficients	首项系数之比	shǒu xiàng xì shù zhī bǐ
$\sphericalangle$ relative magnitudes	相对大小	xiāng duì dà xiǎo
$\square$ Intermediate Value Theorem	介值定理	jiè zhí dìng lǐ
$\odot$ existence theorem	存在性定理	cún zài xìng dìng lǐ